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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,118	10/24/2003	Richard Walter Speer	18079US	1620

7590 05/17/2004
Tyco Electronics Corporation
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EXAMINER
NGUYEN, CHAU N

ART UNIT	PAPER NUMBER
2831	

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,118

Applicant(s)

SPEER, RICHARD WALTER

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark et al. (6,074,503).

Clark et al. discloses an electrical cable (Figures 1 and 3) comprising an outer jacket, a plurality of conductors within the outer jacket, and a filler having a core within the outer jacket, the core having a dielectric enhancing section extending therethrough and a plurality of voids (col. 3, line 66) substantially surrounding the dielectric enhancing section (re claim 1). Clark et al. also discloses the dielectric enhancing section being formed of a thread (col. 4, lines 40-42) (re claim 6).

3. Claims 1, 2, 7 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Koyasu et al. (2003/0205402).

Koyasu et al. discloses an electrical cable (Figures 5, 6, 34 and 35) comprising an outer jacket, a plurality of conductors within the outer jacket, and a filler having a core within the outer jacket, the core having a dielectric enhancing section extending therethrough and a plurality of voids ([0123]) substantially surrounding the dielectric enhancing section (re claim 1). Koyasu et al. also discloses the dielectric enhancing section being formed as a hollow tubular structure (re claim 2), the dielectric enhancing section being formed as a hollow structure (re claim 7), and the core being cross shaped in cross section (re claim 8).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-5 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyasu et al. in view of Gerland et al. (3,516,859).

Koyasu et al. discloses the invention substantially as claimed including the core being polyethylene (re claims 5 and 11), the dielectric enhancing section being formed as a hollow structure (re claim 10), and the core being formed in the shape of a cross (re claim 12).

Koyasu et al. does not disclose an outer skin surrounding the core (re claims 3 and 9) nor the core being extruded with a foaming agent to create the voids (re claim 4). Gerland et al. discloses a cable comprising a core (2) surrounded by an outer skin (3). It would have been obvious to one skilled in the art to surround the core of Koyasu et al. with an outer skin to provide the core with a smooth outer surface since the outer surface of the (foam) core is porous and rough as taught by Gerland et al. It would also have been obvious to one skilled in the art to form the voids of Koyasu et al. by extruding the material with a foaming agent since using a foaming agent in an extruded material to create a foam layer is well-known in the art.

6. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. in view of Gerland et al.

Clark et al. discloses the invention substantially as claimed including the dielectric enhancing section being formed of a thread (re claim 13). Clark et al.

does not disclose an outer skin formed of an insulating material surrounding the core (re claim 9). Gerland et al. discloses a cable comprising a foam core (2) surrounded by an outer skin (3) formed of an insulating material. It would have been obvious to one skilled in the art to surround the foam core of Clark et al. with an outer skin to provide the core with a smooth outer surface since the outer surface of the (foam) core is porous and rough as taught by Gerland et al.

Cited Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tessier et al. and Gareis disclose cable having core filler.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen
Primary Examiner
Art Unit 2831